State of Vermont

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Open GeoData Portal
Project Charter, v0.8
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Revision History

Version	Date	Author(s)	Revision Notes
0.1	09/03/2015	T. Standen	Initial Draft
0.2	09/08/2015	S. Sharp	Additional Input/Edits
0.3	09/16/2015	T. Standen	Review/Edits/Additions
0.4	09/22/2015	T. Standen/S. Sharp	Meeting to review with D. Metraux, further define scope
0.5	09/25/2015	S. Sharp	Rewrite of In/Out of Scope section
0.6	09/28/2015	T. Standen	Revise schedule
0.7	09/29/2015	S. Sharp	Additional minor tweaks to Scope
0.8	10/05/2015	T. Standen	Additional scope item regarding compatibility with Vermont's Open Data Portal

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Project Overview

VCGI currently hosts a VT Open GeoData Portal (herein referred to as the GeoData Portal) which allows users to access and use geospatial information and services. The current GeoData Portal is over a decade old, and lacks the capabilities and functionality that end users and publishers need and expect. This project endeavors to build a modern GeoData Portal supporting the needs of users and publishers. The business need is based on multiple strategic objectives:

- State's Enterprise GIS Strategic Plan[1]:
    - Objective 8: Catalogue geospatial datasets developed by VT state agencies.
    - Objective 10: Coordinate the distribution of data for VT state agencies.
- VCGI's Strategic Plan[2]:
    - Objective 1: VCGI is the recognized clearinghouse for GIS data in the state.

Project Scope

In Scope:

1. Design, build, and deploy a new VT Open GeoData Portal that will provide online access to geospatial data, services, applications, and tools.
2. Meet "User"[3] requirements, including, but not limited to:
    2.1. Browser-based GeoData Portal solution that does not require a browser plug-in.
    2.2. Search engine to help find geospatial data, web services, and web/mobile/desktop applications.
        2.2.1. Search by standard data themes (eg: boundary data, transportation data, etc.) using ISO 19115 Topic Categories standard.
    2.3. Access to a variety of geospatial data
        2.3.1. Downloadable VT GIS data layers and aerial photos (current and historical).
        2.3.2. VT GIS data layers and aerial photos (eg: VT orthos) with no downloading required (ie: as a web service).
        2.3.3. Regional-level (RPC) and town-level GIS data.
    2.4. Variety of download options and formats
        2.4.1. Vector data layers in ESRI file geodatabase and ESRI shapefile format.
        2.4.2. Vector data layers in non-GIS formats (eg: CSV, GeoJSON, KML).
        2.4.3. Option to visualize the data before it is downloaded.
    2.5. Access to metadata
        2.5.1. Metadata that is easy to read with a quick way to get to attribute descriptions and attribute codes.
    2.6. Mechanisms for receiving notification and providing feedback
        2.6.1. Notified whenever new or updated data, web services, or web/mobile/desktop applications are released.

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[1] https://outside.vermont.gov/sites/egcgeo/Documents/EnterpriseGIS_SP_v2008A.pdf

[2] http://vcgi.vermont.gov/sites/vcgi/files/aboutvcgi/Strategic%20Plan%202012%20Final.pdf

[3] "Users" include individuals, businesses and organizations needing access to geospatial data.

2.6.2. "Share" things that a user discovers on the GeoData Portal via social media (eg: Twitter, Facebook, etc.).
- 2.7. Data via web services
    - 2.7.1. Web services containing VT GIS data layers and aerial photos (eg: VT orthos) which users can integrate into their own web mashups.
    - 2.7.2. Web services that work with ArcGIS and Open Source GIS software (desktop, mobile, and browser-based clients).

3. Meet "Publisher"[4] requirements, including, but not limited to:
   - 3.1. Publishing
       - 3.1.1. Post data, web services, applications (web/mobile/desktop), products (eg: layer packages), and tools (eg: scripts and geoprocessing tools).
       - 3.1.2. A publishing workflows that requires a minimal number of manual steps.
       - 3.1.3. Published items can be discoverable and linked through other catalogs/portals (eg: data.vt.gov, data.gov, ArcGIS Online, etc.) so that it can be found by users using other Portals.
       - 3.1.4. Publisher controls their own publishing, information management, and publisher account.
       - 3.1.5. Solution complies with W3C DCAT specifications.
       - 3.1.6. Mechanism which allows publisher to temporarily disable access to a particular dataset, web service, or web application.
       - 3.1.7. Ability to add "custom keyword tags" to GeoData Portal entries to help users find what they are looking for.
       - 3.1.8. Ability to tag datasets, web services, and web/mobile/desktop applications to one or more ISO 19115 Topic Categories (eg: boundary data, transportation data, etc).
       - 3.1.9. Identify and "brand" data, web services, and applications provided by publisher's organization.
       - 3.1.10. Ability to "share" datasets, web services, or web/mobile/desktop applications that publisher publishes on the GeoData Portal via social media (eg: Twitter and Facebook).
   - 3.2. Metadata
       - 3.2.1. Metadata-driven search engine.
       - 3.2.2. Solution is able to harvest ISO, FGDC, and/or ArcGIS compliant metadata records.
       - 3.2.3. Ability to include non-geospatial data files (eg: MS Word document, Excel spreadsheet) with the geospatial data that is shared.
       - 3.2.4. Ability to push out data, web service, or application update alerts to subscribers.
   - 3.3. Security
       - 3.3.1. Publisher authentication and account.

4. Meet administrator/owner requirements, including, but not limited to:
   - 4.1. Administration
       - 4.1.1. Ability configure jobs that automatically harvest data from other distributed heterogeneous data repositories via W3C DCAT specifications and load them into the GeoData Portal.
       - 4.1.2. Solution that has an upgrade path (is not a "one off" solution).
       - 4.1.3. Architecture that allows administrators to easily add functionality (eg: widgets, modules, etc).

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[4] "Publishers" include Vermont State, regional and local government entities, academic institutions and others willing to publish data.

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    4.2. Security

        4.2.1. Ability to create GeoData Portal login accounts and passwords.

        4.2.2. Ability to assign login accounts as users, publishers, or administrators.

        4.2.3. Solution that is able to ensure proper user, publisher, and administrator account security.

    4.3. Geodata from GeoData Portal is consumable by Vermont's Open Data Portal (Socrata platform)

5. Migration of existing VT Open GeoData Portal data catalog entries into new portal.

6. Decommissioning of existing VT Open GeoData Portal.

Out of Scope:

1. Feature rich online GIS mapping tool.

2. Ability to download/connect-to secure or confidential geodata services.

3. Charging for data products beyond what is allowed under VT Public Record Law (1 V.S.A. § 316[5]).

Project Milestones, Deliverables & Schedule

Milestone/Deliverable	Target Delivery Date or Range
PAF Signed	09/01/2015
Stakeholder List	10/02/2015
Charter Signed	10/07/2015
Requirements Signoff	10/26/2015
Communication Plan	10/26/2015
RACI Chart	10/26/2015
Solution Chosen	10/29/2015
Gap Analysis Completed	11/26/2015
Design Documents Completed	12/31/2015
Contractor Selected/Contract Signed	01/06/2016
Build Completed	02/17/2016
Testing Completed (including test of data transfer to VT Open Data Portal)	03/02/2016
Beta Release	03/23/2016
Existing Portal Migration Rollover Completed	04/13/2016
Go Live	04/14/2016
Decommission previous portal	04/27/2016

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[5] http://www.leg.state.vt.us/statutes/fullsection.cfm?Title=01&Chapter=005&Section=00316

Milestone/Deliverable	Target Delivery Date or Range
Project Closeout	05/17/2016

Stakeholders

Stakeholder Group	Impact
Owner - This stakeholder group represents the "owner" of the VT Open GeoData Portal. VCGI is the current Owner.	Build and promote use of new portal
Publishers - These stakeholders represent those who "publish" geospatial information	Upload existing and new datasets to new portal. Will need to understand how to use the new system.
Users - These stakeholders represent "consumers" of geospatial information.	Use new portal to access geospatial datasets. Will need to understand how to use the new system.
Administrators – This stakeholder group represents the "administrators" of the VT Open GeoData Portal. VCGI is currently the only Administrator.	Will need to understand how to manage and administer the new system.

Estimated Project Cost

Staff Effort Hours:

Name	Hours/Week[6]	Duration in Weeks	Total Project Hours	Role/Notes
Steve Sharp	12	30	360	Sponsor, architect/designer, developer, standards, web services
Ivan Brown	16	30	480	Chief architect/designer, developer, standards, database administration
Leslie Pelch	1	30	30	Voice of customers outside of state government.
Trisha Standen	3	30	90	Project Manager
David Metraux	1	30	30	IT Manager
Melissa Prindiville	3	25	75	Assist architect/designer, standards
Erik Engstrom	0.6	25	15	Assist with design and standards

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[6] It is anticipated that hours WILL NOT be evenly distributed during the project duration, but will have peaks and valleys depending on the role of the individual in the project life cycle. Hours for data migration and input are not accounted for here.

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Name	Hours/Week[6]	Duration in Weeks	Total Project Hours	Role/Notes
Lesley Bean	0.6	25	15	Assist with design and standards
		Total Project Hours:	1,095	
Staff cost estimated at:	$70/hr	Total Staff Resource Costs:	$76,650[7]	

Description	One-Time Cost	Annual Reoccurring Cost
Configuration/Installation/Implementation	$	$
Hardware	$	$3,500 (est.)
Equipment	$	$
Software/Licenses	$500 (known)	$
State Labor	$	$
Project Management (contracted services only)	$	$
Other Professional Services	$15,000 (est.)	$
Service Level Agreement/On-going Maintenance Costs	$	$
Hosting Provider	$	$
Staff Time (implementation)	$76,650 (est.)	$
	$	$
Totals	**$92,150**	**$3,500**

Assumptions, Dependencies & Constraints

#	Type (Assumption, Dependency or Constraint)	Description
1	Dependency	Success will mean state agencies and RPCs buy into the GeoData Portal solution, are involved with the development and testing, and ultimately use the GeoData Portal as designed.
2	Dependency	Adequate amount of technical infrastructure (ArcGIS Server power) to accommodate demand from GeoData Portal. Infrastructure upgrade is already included in the project plan.
3	Constraint	Ability to obtain contractor support for custom workarounds.
4	Assumption	Sufficient internal staff resources (across state agencies) with the time and expertise will be allocated to the project.
5	Assumption	Changes in project schedule to do other project priorities will be determined by the Executive Sponsors and the project team will

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[7] This 'budget estimate' is believed to be accurate to within -10 percent to +25 percent.

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		be notified.
6	Assumption	Existing change management process will be utilized.

Project Risks

#	Risk Description	Impact (H/M/L)	Probability (H/M/L)	Risk Plan
1	Insufficient human resources and/or financial resources to successfully complete project	M	M	Make it clear to management ASAP what is needed in terms of human and financial resources once it is clear. Make it clear to management when/if insufficient resources are allocated, and what that means for the project. Re-scope the project to reduce the cost.
2	Project Team isn't able to agree on "required" vs "optional" functional requirements (user stories)	M	L	Remind project team that they must "prioritize" the product backlog into "required" vs "optional".
3	Project Team isn't able to meet project deadlines	H	M	Regular project team meetings to address schedule issues early. Contingency time has been added to project schedule.
4	Changes at VCGI such as key personnel changes	M	L	Re-scope project Adjust project schedule
5	Bureaucratic and/or legal complications get in the way of progress	M	L	Keep DII, ACCD Senior Management, and EGC informed of project.
6	Unforeseen catastrophic event hinders productivity	L	L	Adjust project schedule Articulate that project will help Emergency Management operations
7	DII and possibly others would not support an independent geodata.vt.gov portal from a data.vt.gov portal	H	L	Maintain an open dialogue between EGC and DII to address this issue.

#	Risk Description	Impact (H/M/L)	Probability (H/M/L)	Risk Plan
8	Publishing Partners are not able to migrate existing data to new portal in time for launch	H	M	Develop communications plan to include project update notifications to this stakeholder group, clearly communicate expectations and deadlines early on, with frequent updates/reminders.

Approvals

Role	Name and Title	Signature
Senior Sponsor	Lucy Leriche Deputy Secretary, ACCD	
Sponsor	Steve Sharp, Interim Director, VCGI (Division of ACCD)	
ACCD Functional Manager	David Metraux, Director of IT & Performance Management, ACCD	
ANR Functional Manager	Peter Telep, IT Manager, ANR	
AOT Functional Manager	Shawn Nailor, Agency Director of Data Services, AOT	